# Before the FEDERAL COMMUNICATIONS COMMISSION FILE COPY ORIGINAL Washington, D.C. 20554

In the matter of  Amendment of Part 97 of the Commission's Rules Governing the Amateur Radio Service to Facilitate Spread Spectrum Communications	)		Second and the following	hard seem ( seem 2)	
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Comments of
The Central States VHF Society
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#### INTRODUCTION

The Central States VHF Society (CSVHFS) was formed in 1967 by amateurs interested in the VHF and higher amateur bands. Since its formation, the CSVHFS has held annual conferences to present technical papers on the current circuit designs for equipment suitable to the higher frequency bands as well as information on propagation and operation on these bands. Society membership averages about three hundred people from most of the United States, Canada and a number of other countries. The membership represents many of the most active and knowledgeable people involved in weak signal VHF, UHF and microwave operation.

## SUMMARY

CSVHFS has some reservations concerning this RM. Although we are strongly in favor of developing new technology in the Amateur Service and Amateur Satellite Service, we are concerned that the widespread use of Spread Spectrum (SS) techniques with no frequency restrictions will cause major damage to weak signal operations. Therefore, we urge that the any relaxation of the SS Rules, as proposed by the American Radio Relay League, be accomplished only on specific frequency segments within the Amateur Service bands.

# **PROPOSAL**

We believe that SS operation should be encouraged. We believe that it will eventually prove valuable for both terrestrial and satellite applications and become a mechanism to increase the use of the higher frequency bands by amateurs. However, we contend that it should be restricted to certain frequency segments so as to offer minimal interference to other established users. We contend that this is consistent with Commission policy in the Amateur Service. We cite, as examples, the fact that voice operation is limited to certain segments on the HF and VHF amateur bands. In addition, unattended digital operation is restricted to certain small segments on the HF bands, as are unattended beacons.

In particular, we contend that SS should not be allowed below 450 MHz. We are aware that the current rules allow SS operation above 420 MHz, and have since 1985. It is argued by some that the fact that SS has been authorized in the 420 - 450 MHz band for over ten years, with no reports of interference recorded, proves that it poses no threat to other types of operation. However, we cite ARRL's own words in their petition from which we quote:

"Since the time SS communications were first authorized in the Amateur Service in mid-1985, there have been some experimental amateur operations using SS techniques, but its use has not been widespread."

We believe that this is an understatement and that SS use has been extremely limited. We submit that this is the reason why no interference complaints have been registered. Furthermore we have seen no reports of tests conducted by those amateurs who were experimenting with SS that address its potential interference to weak signal modes.

It has been recommended by TAPR that SS operation be extended to the bands below 225 MHz. Crowding and existing strong signals in those bands make them unlikely arenas for the successful implementation of SS. If at some point in the future SS techniques are developed that prove compatible with narrow band users, expansion to the lower bands may then be appropriate.

CSVHFS would like to see SS develop. We would like to see it become a major factor in Amateur Radio, including its potential for opening the microwave bands to greater amateur operation. However, we contend that, while it may be compatible with relatively high signal strength narrow band modes such as FM repeaters, it is not compatible with relatively weak signal modes such as terrestrial weak signal work and amateur satellites.

In order to allow it to fulfill its potential and still protect these other types of operation, CSVHFS strongly recommends that SS be authorized only in the following segments of the Amateur Service and Amateur Satellite Service bands:

905 - 928 MHz

1240 - 1260 MHz

2410 - 2450 MHz

3300 - 3445 MHz

All above 5500 Mhz, except 5750 - 5770 MHz and 10.360 - 10.380 GHz.

Following this course will protect existing weak signal operation near 432, 902, 1296, 2304, 3456, 5760 and 10,368 MHz as well as amateur satellite operation in the 435 - 438 MHz, 1260 - 1270 MHz and 2400 - 2410 MHz bands, and still permit its use in the bands 2410 - 2450 and all the higher bands authorized for the Amateur Service.

### CONCLUSION

CSVHFS recommends that the Commission follow these recommendations in formulating new SS rules designed to foster its widespread use among amateurs. We further recommend that it place no greater restrictions on SS use, such as station identification and authorized spreading codes, than absolutely necessary. We contend that such a course will foster growth of SS among amateurs and allow them to continue in their historic pursuit of new technologies and the use of higher and higher frequencies, while not disrupting other valuable amateur operation.

Respectfully Submitted,

CENTRAL STATES VHF SOCIETY

By: Paul D. Husby, WOUC

Its President